UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,043	01/17/2006	Weiliang Lian	6246-000004/US/NP	1313

28997   7590   02/04/2009
HARNESS, DICKEY, & PIERCE, P.L.C
7700 Bonhomme, Suite 400
ST. LOUIS, MO 63105

EXAMINER
TESHALE, AKELAW

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
02/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/537,043	LIAN ET AL.
	Examiner	Art Unit	
	AKELAW A. TESHALE	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _01 June 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   **Claims 1-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.   **Claim 1** line **1,** the limitation "next generation network" is not clear because it is not known what is considered as next generation network. The claimed next generation network broadly covers **any** future network and it is not defined in the specifications. Also, terms INAP, CAP, MAP should be spell out for clarity. Moreover, the CAP and MAP recited in the parenthesis are confusing because is not clear if they are part of the claimed limitations. Also line 9,"encoding|decoding" is not clear because *"/"* was not defined; it could mean "and" or "or".

   Claims 2-5, were rejected because they depend on a rejected claim.

   Claims 6-20, have terms that should be spelled out for clarity.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   **Claims 1-20** are rejected under 35 U.S.C. 102(b) as being anticipated by

Finkelstein et al (The Future of Intelligent Network).

As to **claim 1**, Finkelstein discloses a Softswitch for a next

generation Network (see fig.4, the call agent is the softswitch and under

Voice-Over-Packet Network see lines 22 and 25); a network adaptive

device for implementing the communication between the Softswitch and

other devices in said network, as well as receiving call requests (see

fig.4 and under the intelligent network lines 15-18, the SSF and the CCF

are the network adaptive device they do the typical call connection

between the switch and other devices and handle call request); a call

server for determining whether the call received by said network

adaptive device is a common call or a call of the intelligent network and

processing the common call (see fig.4 and under the intelligent network

lines 12-24, the SCF is the call server and is consulted for instructions

by the network adaptive device for instructions therefore he will process

the common calls); and an INAP (CAP. MAP) adapter for responding

the call of the intelligent network and encoding/decoding the INAP
message (see under Voice-Over-Packet Network lines 35-46, the IN
capabilities can be access using *SS71* TCAP therefore INAP which is
layer on top of the TCAP).

As to **claim 6**, Finkelstein discloses a system for implementing an
intelligent network, including: a Softswitch equipment, comprising: a network
adaptive device for implementing the communication between the Softswitch and
other devices in said network, as well as receiving the call request (seefig.4 and
under the intelligent network lines 15-18, the SSF and the CCF are the network
adaptive device they do the typical call connection between the switch and other
devices and handle call request); a call server for determining whether the call
received by said network adaptive device is a common call or a call of the
intelligent network and processing the common call (see fig.4 and under the
intelligent network lines 12-24, the SCF is the call server and is consulted for
instructions by the network adaptive device for instructions therefore he will
process the common calls); an INAP adapter for responding the call of the
intelligent network and encoding/decoding the INAP message (see under Voice-
Over-Packet Network lines 35-46, the IN capabilities can be access using *SS71*
TCAP therefore INAP which is layer on top of the TCAP); at least one SCP for
executing intelligent service logics and producing INAP messages (see fig.4,
there is and SCP in the PSTN side); and an IP network for connecting said

Softswitch and the SCP (see under Voice-Over-Packet Network lines 43-46).

As **claim 9,** Finkelstein discloses a method for a PSTN telephone to access into an intelligent network service in a next generation network (see introduction lines 37-40), herein there is at least one SCP in said next generation network for executing the intelligent service logics (see fig.4, the call agent is the SCP in the packet network, NGN); issuing a call request from said PSTN telephone through dialing an accessing code (see Specialized Resources lines 3-8, access web content via standard telephone connection therefore a call request using an access code); transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network (see Specialized Resources lines 3-8, accessing the web is a service from PSTN to NGN that requires a protocol suitable for the NGN); determining whether said call request is an intelligent network service provided by the SCP or not (see under Voice-Over-Packet Network lines 35-40, the call agent support limited SCF capabilities to process service request therefore there is a way to determine if the service can be provided by the SCP); if said call request is an intelligent network service provided by the SCP, encoding said-call request into an INAP message and transferring the message to said SCP (see under Voice-Over-Packet Network lines 35-46, the SCP only communicates through TCAP,INAP is in the top layer of the TCAP protocol, therefore call request are encoded into INAP messages); and responding said INAP message and processing said call request by said SCP (see under Voice-Over-Packet Network lines 35-46, the SCP

communicates with the signaling gateway to access a service of the IN therefore

the gateway will respond said INAP message and will process the call request by

the SCP).

As to claims **13 and 17**, Finkelstein discloses a method for a telephone in

a next generation network to access into an intelligent network service in a PSTN

network (see title of fig.4, inter working of PSTN with VOIP therefore calls from

one network to the other), herein there is at least one SCP in said PSTN network

for executing the intelligent service logics (see fig.4, there is one SCP in the

PSTN side); issuing a call request from said telephone in said next generation

network through dialing an accessing code (see under Voice-Over-Packet

Network lines 3540, process service request for IN capabilities in the PSTN ,.i.e.

toll-free numbers, therefore a call request from the telephone accessing a code);

determining whether said call request is an intelligent network service provided

by the SCP or not (see under Voice-Over-Packet Network lines 35-40); if said

call request is an intelligent network service provided by the SCP, encoding said

call request into an INAP message; transforming said INAP message *into a*

format suitable for the PSTN network and transferring said INAP message to said

SCP (see under Voice-Over-Packet Network lines 35-46, the SCP only

communicates through TCAP,INAP is in the top layer of the TCAP protocol,

therefore call request are encoded into]NAP messages); and responding said

INAP message and processing said call request by said SCP (see under Voice-

Over-Packet Network lines 35-46, the SCP communicates with the signaling

gateway to access a service of the IN therefore the gateway will respond said

INAP message and will process the call request by the SCP).

As to **claim 2**, Finkelstein discloses that said Softswitch further includes: a

resource manager for managing intelligent peripherals, performing audio

interaction with a user through the call server, and transmitting the user input

data to said INAP adapter (see Voice-Over-Packet Network lines 35-40, the call

agent (softswitch) support limited SCF capabilities to process service request

,and access IN capabilities in the PSTN therefore a resource manager for

managing intelligent peripherals and see under The Intelligent Network lines 25-

27, the IN can use special equipment to play announcement and collect user

information and since all these functionality is done through the resource

manager the user input data is transmitted to the INAP adapter).

As to **claim 3**, Finkelstein discloses characterized in that said Softswitch

further includes: a signaling transmitting adapter for transferring signaling data

through IP packets (see fig.4 and under Voice-Over-Packet Network lines 22-25,

the fig.4 shows a signaling gateway coming from the PSTN network and since

the softswitch controls the packet back bone network there is a signaling

transmitter adaptor for transferring signaling data through IP packets); and a

media gateway control adapter for transmitting data between said Softswitch and

one or more media gateways in said network (see under Voice-Over-Packet

Network lines 35 and 36 the softswitch controls various gateways therefore a

media gateway control adapter).

As to **claim 4**, Finkelstein discloses wherein the softswitch characterized
in that the media gateway control adapter uses one or more of the following
protocols: H.323, MGCP, H.248 and SIP (see under Voice-Over-Packet Network
lines 47-57).

As to **claim 5**, Finkelstein discloses wherein the softswitch characterized
in that said network adaptive device includes: an INAP/TCP interface for directly
transmitting an expanded INAP encoded message through TCP/IP protocol (see
under Voice-Over-Packet Network lines 35-57).

As to **claim 7**, Finkelstein discloses characterized in that said system
further includes: intelligent peripherals for providing special resources required by
the intelligent network services (see under The Intelligent Network lines 25-32);
and Said Softswitch further includes: a resource manager for managing said
intelligent peripherals, performing audio interaction with a user .through the call
server, and transmitting the user input data to said INAP adapter (see Voice-
Over-Packet Network lines 35-46).

As to **claim 8**, Finkelstein discloses a signaling gateway, connecting to
said IP network at its one side and to a PSTN network at another side, for
transferring signaling data between said IP network and said PSTN network
(see fig.4); a media gateway, connecting to said IP network at its one side and
to a PSTN network at another side, for transferring media data between said

IP network and said PSTN network (see fig.4); said Softswitch further includes: a signaling transmitting adapter for transferring signaling data through IP packets; and a media gateway control adapter for transmitting data between said Softswitch and one or more media gateways in said network (see Voice-Over-Packet Network lines 35-36, controlling various gateways therefore a controller and a signaling adapter).

As to **claims 10 and 19,** Finkelstein discloses wherein that said step for transforming the call request includes: transforming the call request in SS7 signaling format into a format suitable for transmitting on the IP network (see fig.4, a signaling gateway therefore means for transforming ss7 signaling to IP format).

As to **claims 11 and 20**, Finkelstein discloses wherein that said step for transforming the call request includes: transforming the call request in *SS7* signaling format into the SIGTRAN protocol format or H.248 protocol format (see Voice-over-Packet Network lines 55-57, Megaco/H.248).

As to **claims 12, 14 and 18,** Finkelstein discloses that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said PSTN telephone is an accessing code of the intelligent network

(see under Next-Generation Network).

As to **claim 15**, Finkelstein discloses that said step for transforming

includes: transforming the INAP message data in 1P network format into a

format suitable for the PSTN network (see Voice-Over-Packet Network lines 35-

46).

As to **claim 16,** Finkelstein discloses that said step for transforming

includes: transforming the INAP message data in the SIGTRAN protocol format

or H.248 protocol format into the SS7 signaling format (see Voice-Over-Packet

Network lines 35-57).

Conclusion

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to AKELAW A. TESHALE whose telephone

number is (571)270-5302. The examiner can normally be reached on M-F

7:30am-5:00 Pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from
the Patent Application Information Retrieval (PAIR) system. Status information
for published applications may be obtained from either Private PAIR or Public
PAIR. Status information for unpublished applications is available through
Private PAIR only. For more information about the PAIR system, see http://pair-
direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-
free). If you would like assistance from a USPTO Customer Service
Representative or access to the automated information system, call 800-786-
9199 (IN USA OR CANADA) or 571-272-1000.

/Akelaw A Teshale/
Examiner, Art Unit 2614
/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614